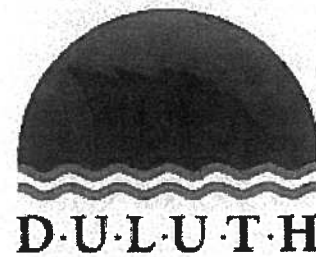


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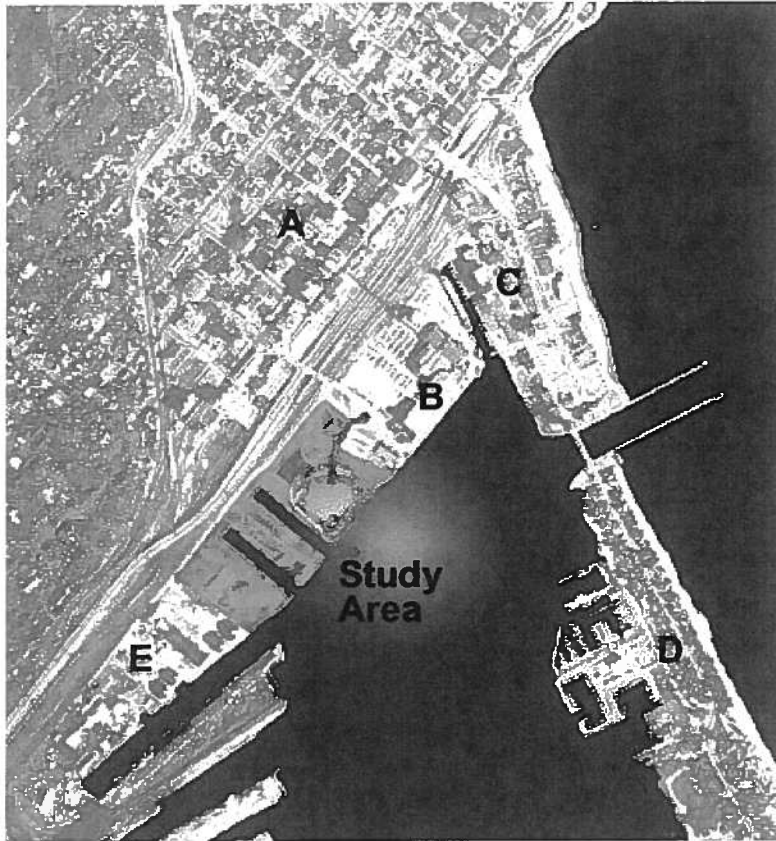
Bayfront District Master Plan



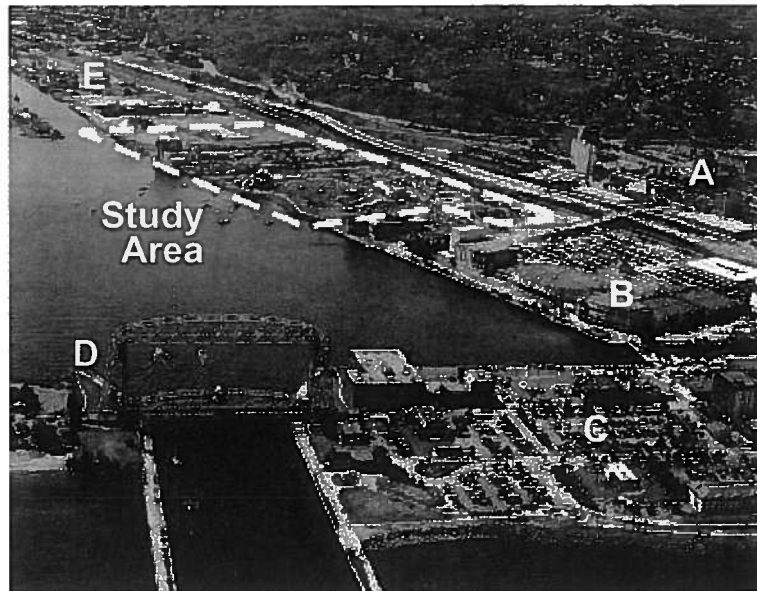
for the
Duluth Economic Development Authority
Duluth, Minnesota

May 20, 2002

URS Planning & Urban
Design Group
Minneapolis
James Miller Investment Realty
Saint Paul



The Bayfront Study Area on St Louis Bay.
A) Downtown, B) Duluth Entertainment and Convention Center, C) Canal Park, D) Park Point and E) Industrial.



Purpose

The purpose of the Bayfront Master Plan is to prepare a long-range plan for approximately 25 acres of bayfront properties west of the Lake Superior Center, surrounding Bayfront Festival Park. The Plan is to reflect the recommendations of the Mayor's Bayfront Development Task Force from July, 2000, as well as findings from four major public engagement events, presentations to special interest groups and professional analysis.

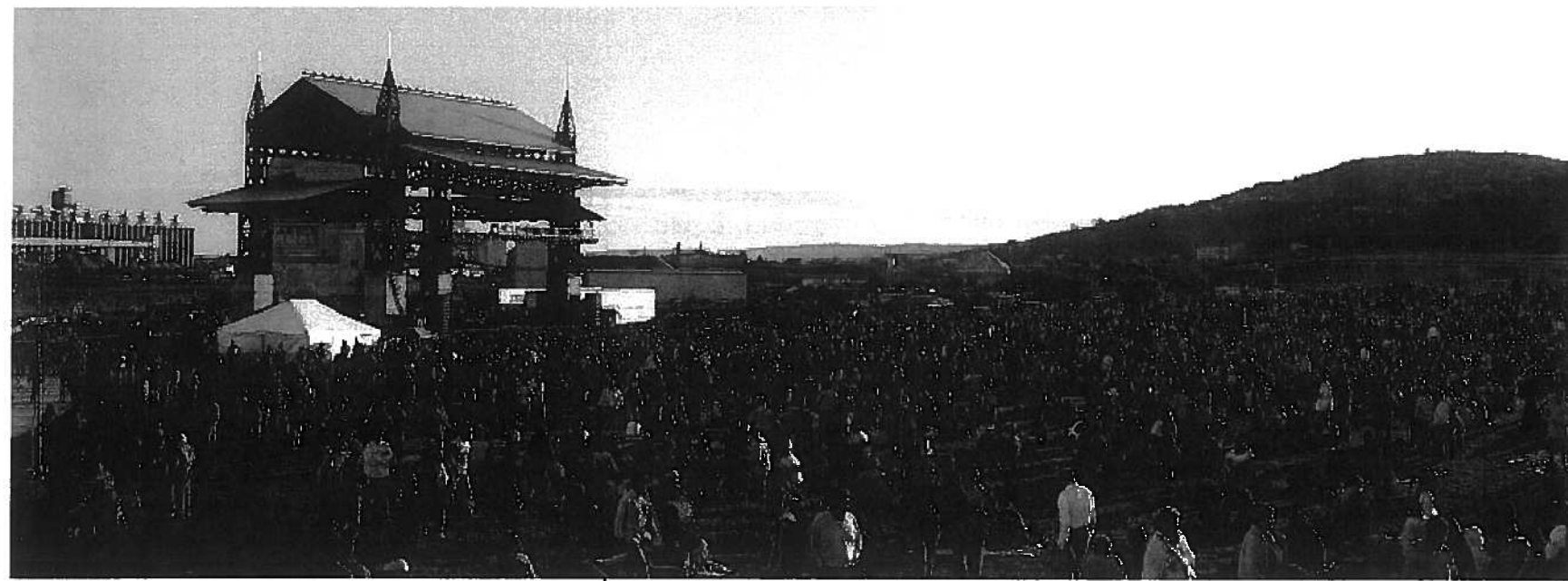
Goals

The goals for continuing redevelopment of the Bayfront District are to:

- Provide opportunities for economic development (employment and taxes)
- Improve public access to Saint Louis Bay
- Improve the environmental quality of the site and the bay
- Contribute to the quality of life of the Duluth region

Context

Duluth has traditionally been a center of transportation transitions, and, in an evolving way, continues in that role today. The site is located on Saint Louis Bay near the channel outlet to Lake Superior. The Duluth **Lift Bridge** spanning the channel is one of the city's prominent landmarks. The lift bridge allows international shipping traffic into the bay and provides access between **Park Point**, a residential district with important regional public water access and **Canal Park**, a burgeoning business district with a historic warehouse theme near the city's central business district. The Duluth Entertainment and Convention Center (**DECC**), a mid-size convention and theater facility, and the **Lake Superior Center**, a freshwater aquarium dedicated in 2000 are located between Canal Park and the study site. **Playfront**, a children's play structure built by the Junior League is located on Railroad Avenue at the entry to the site. Playfront is very popular with resident families and schools and an important wayside for traveling families and school groups. A parking lot surrounds Playfront.

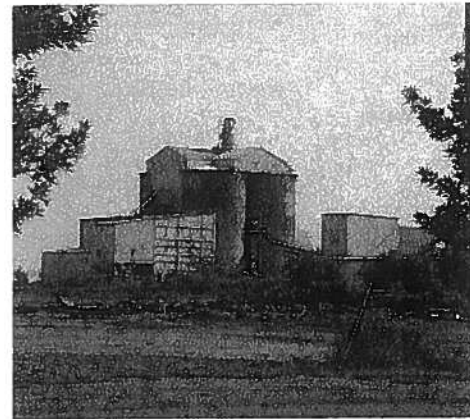


*Slip 2 on the right, Lake Superior Center and Aerial Lift bridge left, Park Point beyond. Interstate-35 is in the foreground
2001 Blues Festival at Bayfront Festival Park (top).*

(Context continued) In the Summer of 2001 Bayfront Festival Park was inaugurated. This 20,000 person capacity outdoor amphitheater provides a bayfront venue for music performances. Performances are scheduled by the City of Duluth and Duluth Entertainment and Convention Center (DECC) which also administers the parking facilities nearby. It is anticipated that there will be up to 5 or 6 major performances and 10 or more minor events per year, scheduled between Spring, Summer and Fall. The Festival Park site remains open to public use when it is not programmed for performances.

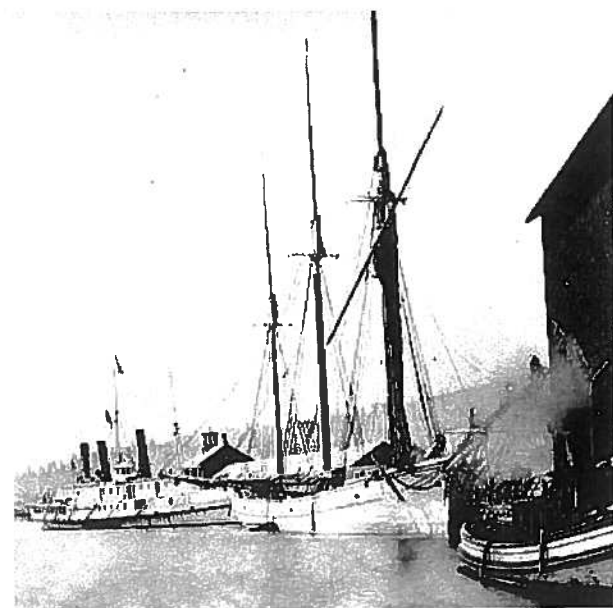
Immediately west of the site is an industrial zone dominated by surface bulk storage. Very little waterborne transportation is utilized and much of the rail infrastructure has been abandoned. The area is well served by highways capable of handling truck loads. Manufacturing is performed further west including various fabrication and processing operations.

Although the site is within one-quarter mile of the municipal campus and the central business district, it is isolated by Interstate 35, the former rail yard and several active tracks. The Fifth Avenue bridge has a very poor pedestrian environment. Vehicular access from I-35 and downtown is via the Fifth Avenue bridge. Pedestrians can use a trail under the freeway, a sidewalk on one side of Fifth Avenue, or a skyway through the DECC several blocks east at Third Avenue.



The Lafarge cement transfer facility occupies a portion of the Eighth Avenue Pier.

*Below, the Indiana Harbor departing Duluth March 23, 2002.
Photo: Duluth Seaway Port Authority*



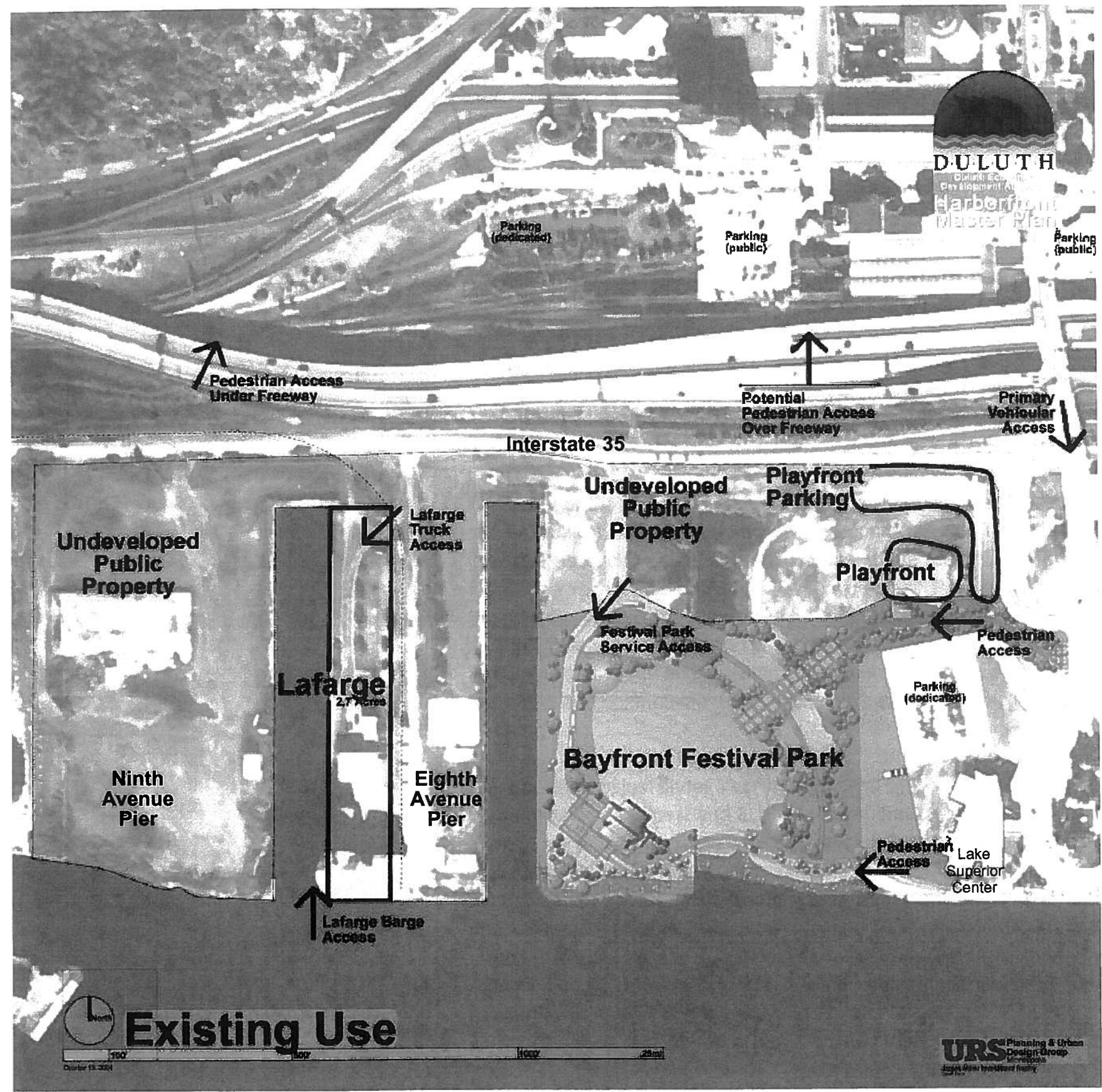
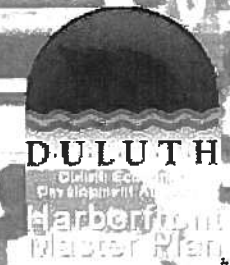
(Context continued) Within the site, on the Eighth Avenue Pier adjacent to Slip 3, Lafarge Corporation maintains a 2.7 acre trans-shipment facility that transfers cement from barges to trucks. Rail access is still possible but not recently evident. The main silo structure at the end of the pier was built in the early 1900's and forms a memorable industrial landmark on the waterfront.

Modern industrial port facilities are being developed elsewhere in the harbor where larger sites, rail access, heavy duty roads and specialized equipment are available. The industrial sites adjacent to the study area and nearer downtown are primarily used for surface storage and manufacturing. Very little use is made of their water access potential which has largely fallen into disrepair. The study area currently serves as a transition zone between public entertainment and tourism uses to the east and the industrial port facilities to the west.

The property north of the study area, between Railroad Street and downtown has been transformed from railyards to freeway. All but a few tracks used for tourist and heritage trains have been removed. The portion of the former railyard west of the study area that is not committed to freeway is currently vacant. Some of the freeway adjacent to the site is elevated.

The study area has over 1 mile of Saint Louis Bay shoreline (including the 1500 foot Festival Park shore). There are two 120 foot by 850 foot slips used historically for berthing and loading ships. Most of the water's edge is armored with concrete seawalls, mostly in disrepair. Timber walls protected some areas and are also now largely in disrepair allowing erosion of the site into Saint Louis Bay. The destruction will continue to accelerate as more of the barriers are breached allowing ice and waves to invade behind the walls. Boulder riprap protects a portion of the seawall in Slip 3.

Finally, an on-going review of the Duluth Comprehensive Plan has revealed the need for additional downtown housing, including affordable, live/work and upscale opportunities (Comprehensive Plan Update: November 2001).



Existing Use

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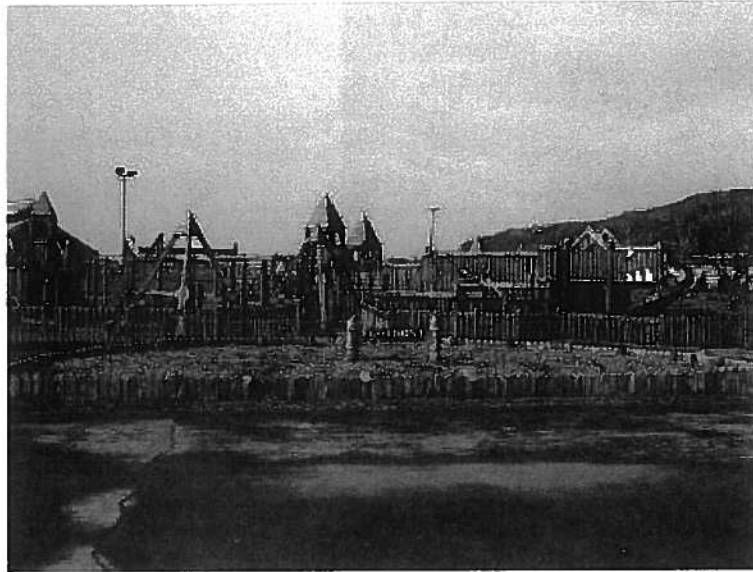
Opportunity

The obvious amenity of the site is its proximity to Saint Louis Bay and the dramatic views of the harbor, lift bridge, the Duluth skyline and harbor activity. The site has easy freeway access, ample parking, an established pedestrian clientele nearby in Canal Park, visibility throughout the community and Bayfront is a known location. The regular programs hosted at the convention center, daily traffic through the Lake Superior Center and Playfront, proximity to the Depot and Transportation Museum and occasional events at Festival Park provide both a baseline of daily visitors plus peak loads during events. Its central location and visibility at one of Duluth's main downtown exits make this site ideal for visitor interception for information and commercial services. The location on Saint Louis Bay in downtown could be a unique housing opportunity for urban waterfront living.

A majority of the property is in public ownership, held by agencies with general public works or economic development missions. These properties have been cleared of most structures and are ready for redevelopment. The recent dedication of Bayfront Festival Park and the Lake Superior Center provide momentum for redevelopment of the site. And, a variety of interest groups and philanthropic projects have raised public awareness of the site and its potential for improving public access to the waterfront and contributing to the economic health of the region.

Issues

An **in-holding** of just under 3 acres bisects the site, occupying half of the property between Slips 2 and 3. Lafarge Corporation operates a cement silo and transfer facility. The company unloads barges and transfers the material to trucks for construction projects in the Duluth region. For the purposes of this study, it is assumed Lafarge will remain and preliminary phases of redevelopment will occur in cooperation and coordination with the on-going operations at Lafarge. In the future, Duluth Seaway Port Authority could relocate and consolidate cement operations to more modern facilities elsewhere in the port.



(Issues continued) Site studies and archival research have established the probability of an industrial legacy of various pollutants in the soil. **Contamination** is expected to be at relatively low levels that are simple to remediate with on-site use of excavated earth. Further site investigation is required as well as a contingency plan for correcting situations as they are discovered.

Playfront, a beloved and well used community play lot is aging, and does not meet current accessibility and safety standards. In addition to the physical design of the structures, recent federal product warnings and voluntary recalls of treated wood similar to those used in the play structures indicates a health hazard may be present in the structures, soils and wood chip cushion materials. Playfront requires replacement with safe and accessible features and materials. The sentiment of participants in the planning process was to keep the location including simple and safe accommodations for access.

A botanical **conservatory** advocated by Bayfront Visions, Inc., has been proposed for the study area. The group has attracted popular support for its goals and location at the Bayfront. At a public workshop in March 2002 a consensus was reached for locating the conservatory on the Ninth Avenue Pier on a prime site adjacent to the mouth of Slip 3. The city has committed to providing the site at low or no cost with reversionary intentions to develop a park if the project does not come to fruition. The city has also committed to providing the opportunity for future expansion of the facilities if the endeavor proves to be sustainable. Coordination of infrastructure and the character of the adjacent development as it relates to the conservatory will be a key element of more detailed design of the Ninth Avenue Pier.

Recommendations



Recommendations

Access

Vehicular conflicts, exposure to weather extremes, lack of signing and aesthetically vacuous surroundings make pedestrian access to and across the site challenging and uninviting. Improving non-vehicular and transit access and circulation will be an essential element of a successful redevelopment effort giving visitors better options for staying on-site for more than one activity, and reducing the demand for redundant parking facilities.

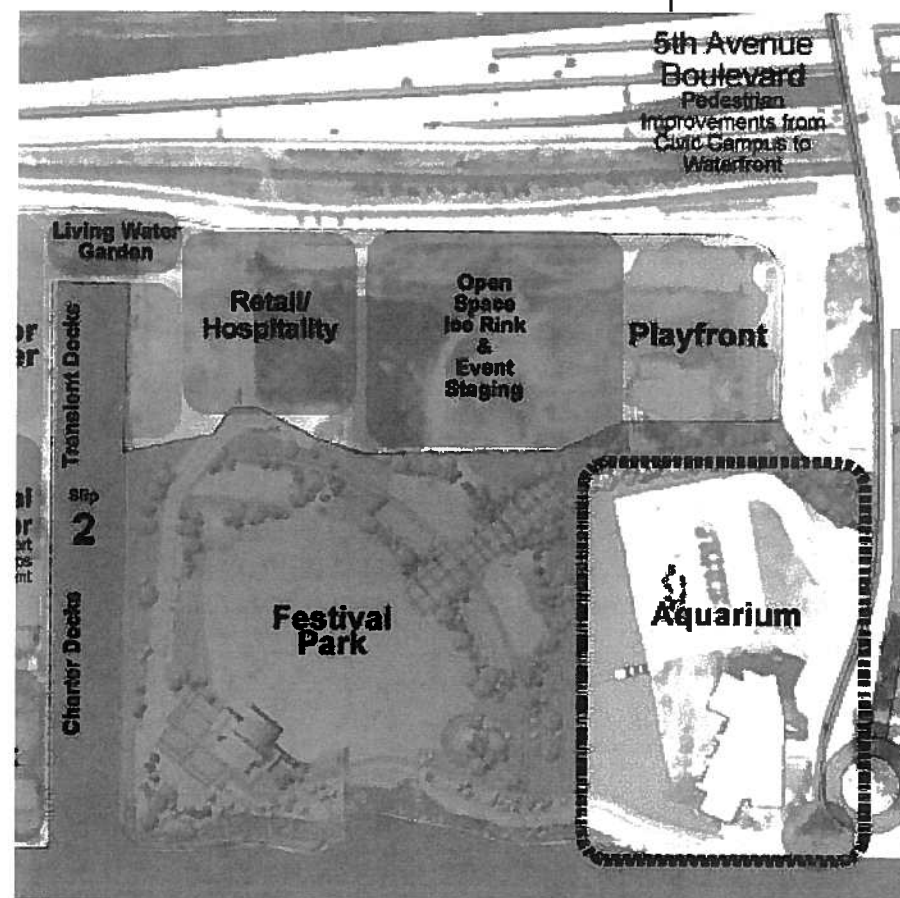
Recommendation: Improve the Baywalk from Canal Park in front of DECC to the Lake Superior Center. Improve the pedestrian and bicycle environment on Fifth Avenue from the Depot across Interstate 35 to the Lake Superior Center and connect with the improved Baywalk. Improve

pedestrian access from DECC parking lots and garages and parking facilities north of the freeway. Improve the trail under Interstate 35 west of the Depot. Make connections west to the Munger Trail and the pedestrian bridge. Build a new pedestrian bridge over the freeway west of the Depot. Provide for a continuous pedestrian and bicycle route and signing across the site including good public access to the water's edge.

Playfront

Playfront is in need of replacement. It is a popular facility with a following that might not relocate easily. Bayfront should include a large, sophisticated series of play structures that are accessible, up to current safety design standards, and that can accommodate large groups of children of various ages.

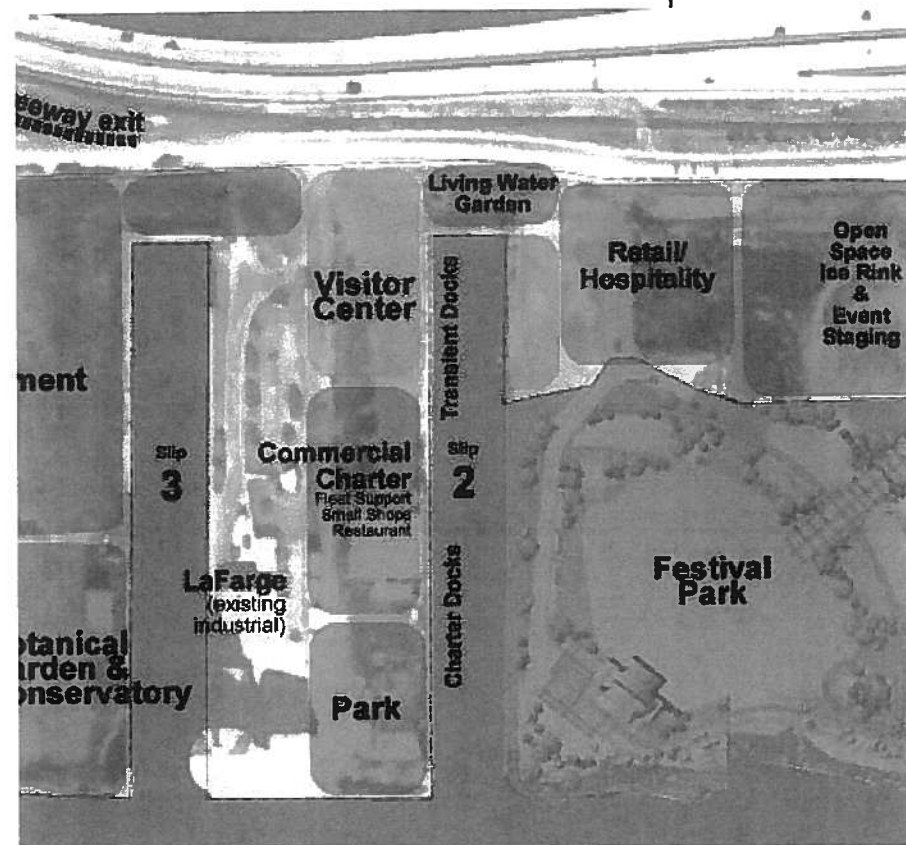
Recommendation: Replace Playfront near its present location. Provide bus, handicap and off-peak parking. Improve pedestrian access from DECC parking (1.5 acres including parking).



Playfield, Ice Rink & Bayfront Festival Park staging area

Playfront currently lacks an informal playfield open space, and an area for winter recreation. Bayfront Festival Park needs a staging area for events and a forecourt and open space connection to the city.

Recommendation: Create a city park on Railroad Street adjacent to Playfront for informal play, ice skating, open space and to maintain the view of the bay and Bayfront Festival Park from downtown (2 acres).

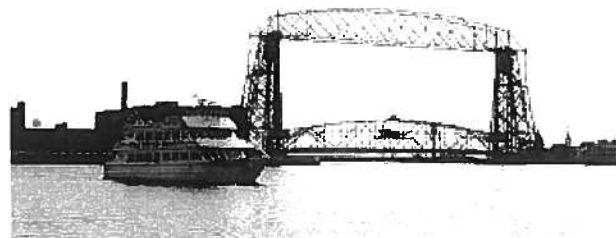


Slip 2 Commercial Redevelopment

Much of the study area is owned by the Duluth Economic Development Authority (DEDA). DEDA's mission is to create economic opportunities for the city, and specifically to create direct economic benefits through redevelopment of properties such as those it owns in the study area. The area adjacent to Bayfront Festival Park on Slip 2 is visible from Interstate 35 and downtown, is easily accessible by vehicles and pedestrians, has water's edge amenities and is easily served by utilities. There are no hospitality venues west of the Minnesota Slip on the far side of DECC.

Recommendation: Dedicate a portion of the site east of Slip 2 on Railroad Street to hospitality and retail redevelopment. Develop design guidelines that define scale and character compatible with the waterfront district design guidelines and the other elements of the Bayfront area master plan (1.5 acres).

The Vista Queen in Saint Louis Bay.

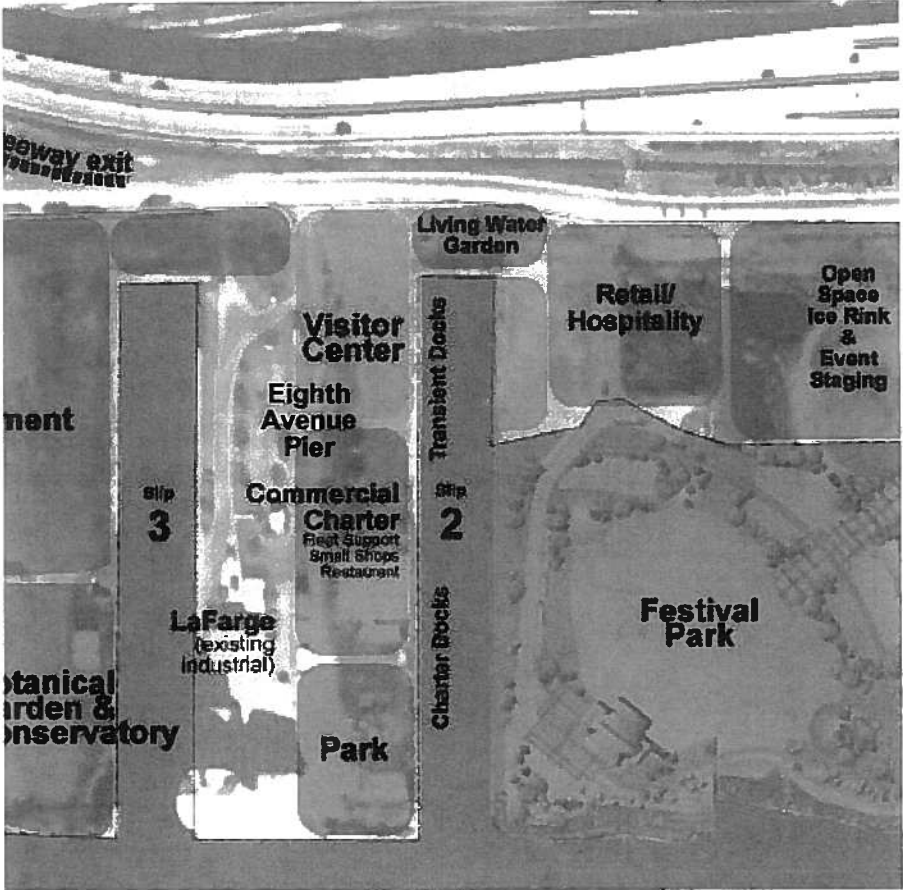


Slip 2

The Minnesota Slip east of the DECC is currently home to much of Duluth's charter fleet. The boats take customers into Lake Superior and Saint Louis Bay for pleasure, sight-seeing cruises and fishing expeditions. An operable pedestrian bridge crosses the mouth of the Minnesota Slip complicating boat access. Opportunities for transient docking of pleasure boats are lacking on the downtown edge of Saint Louis Bay.

The city desires to minimize the need for operating the bridge by removing daily boat use to another suitable and accessible location.

Recommendation: Perform a detailed study of the feasibility of improving and enlarging Slip 2 for transient and charter boat use, a boat basin and public water access. Include floating docks and ramps, realignment and treatment of stormwater entering the slip, rehabilitation of the seawalls, removal of debris and sediment from the slip and modification of the mouth of the slip to reduce wave surge from ships and foul weather.



**Eighth Avenue Pier
Duluth Visitor Center**

The study area site is central to the city's business district and major lake and bayfront attractions, it is visible and very accessible to residents and travelers. The site is perfectly situated to capture and serve travelers, as well as those already in the community. A visitor center could be developed with the cooperation of several agencies serving **visitors and residents** in the region including: the Department of Transportation, Office of Tourism, and Department of Natural Resources, State Parks, USDA Forest Service, National Park Service, Corp of Engineers, Saint Louis County and other local agencies. The facility could be an opportunity to consolidate separate locations maintained by these agencies.

Recommendation: The Duluth Bayfront Visitors Center should be located on the Eighth Avenue Pier on slip 2.

Living Water Garden

Surface and stormwater from downtown Duluth and many of the highway and road surfaces north of the site drain through storm sewers into Slip 2. Perennial flow from Clarkhouse Creek is also believed to drain into Slip 2. Keepers-of-the-Waters, a local non-profit environmental interest

group has expressed interest and built a constituency for creating a demonstration water purification project within the study area. The Living Water Garden would use specially designed features called flow forms in conjunction with settling ponds and wetlands to remove sediment and pollutants and restore oxygen to stormwater run-off before returning it to

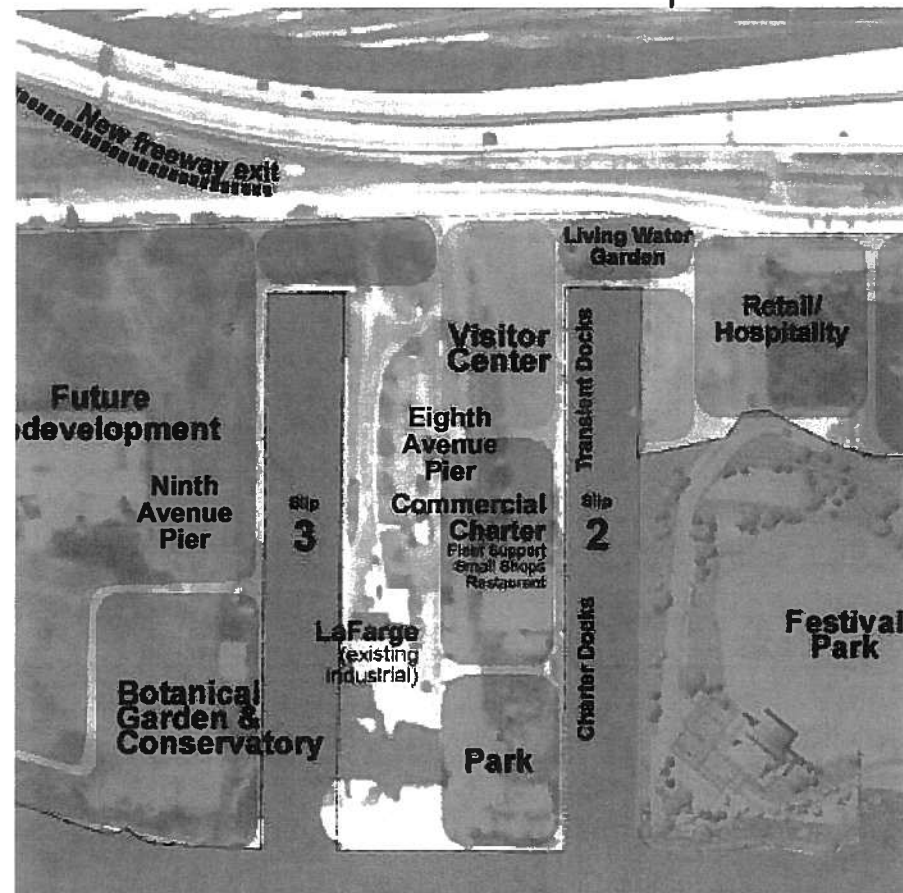
Lake Superior. The proposed Living Water Garden project would include an educational component and would be developed as an aesthetically pleasing amenity to adjacent redevelopment. A stormwater cleansing and educational feature serving a portion of downtown Duluth is consistent with the goals of the Bayfront area master plan.

Recommendation: Provide space at the end of Slip 2 on Railroad Street for the development of a demonstration Living Water Garden (1.5 acres).

Lafarge

In the short-term the configuration of the study area and Lafarge's property present challenges to circulation, assembly and connectivity of developable parcels. The industrial use per se, though at first glance incompatible with public uses, is an honest waterfront dependent use, it adds animation to the waterfront, is not inherently a nuisance, polluter nor safety hazard with thoughtful design of facilities and public access.

To remain competitive, the Lafarge operations should eventually be relocated to a modern industrial facility elsewhere in the port. The first phases of redevelopment of the district should, however, accommodate the continued operation of the existing facility without significantly impeding its functionality. The eventual availability of the site for redevelopment should be anticipated including adaptive reuse of the historic industrial structures and construction of other structures for commercial or public facilities.



If the industrial use of the site and slip could be consolidated to allow for public access across a portion of the site, and perhaps redevelopment, rehabilitation of the slip the facility could contribute to the vitality of the district.

If the facility were to be relocated, the silo structure and perhaps some of the ancillary structures, could be remodeled for public use. The views available from the silos across the bay and toward the city are spectacular and could be used to anchor a variety of public uses while reflecting character of the historic working waterfront.

Recommendation: Plan preliminary phases to work in harmony with the continued presence of Lafarge on Slip 3. Infrastructure improvements and future plans should anticipate both its long-term presence and the possibility of relocation.

Recommendation: Work with the Duluth Seaway Port Authority to relocate the operation to a more modern facility elsewhere in the port.

Slip 3

As public use of Slip 2 increases additional capacity can be developed in Slip 3 for charter and pleasure boat use. Coordination with Lafarge and the commercial use of the slip is important for safety and economic reasons. Redevelopment of this slip should not be performed in a way that accelerates relocation of industrial waterfront uses unless an explicit policy decision is made.

Recommendation: Perform a detailed study of the feasibility of improving Slip 3 for additional transient and charter boat use and public water access. Include rehabilitation of the seawalls, floating docks and ramps, removal of debris and sediment from the slip and modification of the mouth of the slip to reduce wave surge.

Ninth Avenue Pier Conservatory

A conservatory at the water's edge provides opportunities for education, indoor recreation and relaxation in inclement weather surrounded by the beauty of the Saint Louis Bay panorama. A conservatory would compli-

ment the educational mission of the Lake Superior Center and provide another draw for visitors to and through the site. The development by a non-profit educational institution on the waterfront should contribute to the overall redevelopment character and quality, and it should serve as an amenity for the redevelopment of the entire district.

Recommendation: Provide a site through a memorandum of agreement on the Ninth Avenue Pier for the development of a non-profit botanical facility (3 acres). The MOA transferring the site would define expectations for facility development including a schedule with measurable deadlines for establishment of the organization, adoption of a strategic plan, financial plan, fund raising, design and construction. The MOA would outline the city's responsibilities and procedures for modifying or terminating the agreement.

Future Redevelopment

As the market develops on the Eighth Avenue Pier, and the conservatory plan gains momentum, interest should grow for opportunities on the Ninth Avenue Pier. Keep character and use expectations flexible to respond to the developing market (5-10 year horizon) but compatible with the proposed conservatory and other planned development in the study area and the larger waterfront district.

Recommendation: Conduct environmental assessment and remediation as necessary, design and budget public utility infrastructure, prepare a request for development proposals and obtain legislative and policy clearances for planned uses.

